



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Fox River

Water Body ID: 0038

Water Body Segment at a Glance:

County: Clark
Nearby Cities: Kahoka
Length: 42 miles
Pollutant: *E. coli* bacteria
Source: Rural nonpoint sources



State Map Showing Location of Watershed

Scheduled for TMDL development:

TMDL development schedules are subject to change.

The most current schedule for TMDL development is available on the department's website at dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm.

Description of the Problem

A water body is considered impaired when it fails to meet applicable water quality standards. Water quality standards consist of designated uses, water quality criteria, an antidegradation policy and implementation procedures. The Fox River is impaired due to exceedances of water quality criteria that protect recreational uses.

Designated uses of Fox River*

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Livestock and Wildlife Protection (LWP)

*In addition to these specific uses, all waters of the state are protected by the general water quality criteria that are specified in the state's Water Quality Standards at 10 CSR 20-7.031(4).

Use that is impaired

- Whole Body Contact Recreation Category B (WBC-B)

Criteria that apply

- Missouri's Water Quality Standards at 10 CSR 20-7.031(5)(C) and Table A state that the *E.coli* bacteria count in category B waters shall not exceed 206 counts per 100 mL. This count is the

geometric mean during the recreational season (April 1- October 31) in waters designated for whole body contact recreation.

Assessment and water quality data

Excessive amounts of *E. coli* bacteria in surface water used for recreation are an indication of an increased risk of pathogen-induced illness to humans. Infections due to pathogen-contaminated waters include gastrointestinal, respiratory, eye, ear, nose, throat and skin diseases. *E. coli*, are bacteria found in the intestines of warm blooded animals and are used as indicators of the risk of waterborne disease from pathogenic bacteria or viruses.

The department judges a stream to be impaired by *E. coli* if the geometric mean of data collected during the recreational season exceeds the criterion in any of the last three years for which there is five or more measurements. For the Fox River, adequate data was collected in 2007 and the recreational season geometric mean exceeds the water quality criterion.

TMDL for the Fox River

The Fox River TMDL will calculate the maximum amount of each listed pollutant that the stream can receive and still meet water quality standards. The TMDL will also identify all potential or suspected pollutant sources in the watershed and distribute the allowable pollutant loads among those various sources. When developed, the Fox River TMDL will use the most current and available data. For this reason, the final TMDL may present information that differs from that contained in this information sheet.

For more information call or write:

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Map Showing the Fox River Watershed

